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## An Angler's Cabinet



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# An Angler's Cabinet

Like contributing editor Rick White, our readers tell us they enjoy fishing as much as making sawdust. It was in the spirit of this sense of community that we asked Rick to share some of his favorite fishing hot spots. He flatly declined the request. Apparently, this is where fishing and woodworking part ways, because he was more than happy to share the design of this angler's cabinet instead.

Fishing is more than a hobby for Rick. When free time rolls around, you can generally find him in one of two places: His shop or his boat. One common denominator between fishing and woodworking for him is the absolute necessity of having the proper "tool" for the proper job. When he needs a mortising machine or maybe a Fenwick fishing rod, he buys what he needs. It gets troubling, however, when all those tools start to accumulate. Storing tools can be a challenge, whether it be in the workshop or in the den with those trophy fishing mounts.

Hence this storage cabinet, specifically designed to hide — er, store — his ever-growing collection of fishing tackle. Rick chose knotty pine lumber and plywood for this project to reflect his Northwoods heritage, and he even lined the interior of the cabinet with 1/4" tongue-and groove-pine paneling to add visual interest.

## Storage is the Key

By making use of every inch of interior space, Rick is able to store a ton of stuff in this cabinet and retain a relatively small footprint. Each door is a swinging cabinet of its own, holding rods, reels, nets, stringers and other gear. The trade-off is that this unit is very tall — just a few inches short of an 8' ceiling. (Check your ceiling's height before you build; you may need to adjust the height.) The shelves are adjustable and include a couple of full-extension drawers for monofilament line (to keep it out of the light ... it can break down from ultraviolet rays) and other smaller items like special reels and tools. (Rick even bought a new drawer lock router bit to build the interlocking drawer joints — more about that on page 134.)

The casework design for this cabinet is basically two big boxes that share a base and decorative top. Heavy-duty wraparound

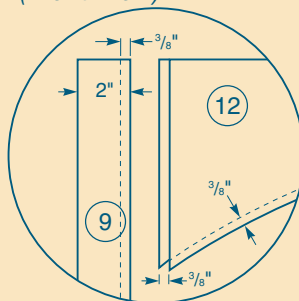


*Fishing poles, gear and other essentials are out of sight but not out of mind in this project designed to blend two wonderful hobbies.*

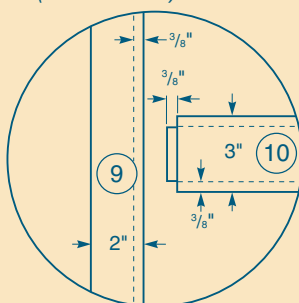
## Door Exploded View



**Top Door Rail  
(Front View)**

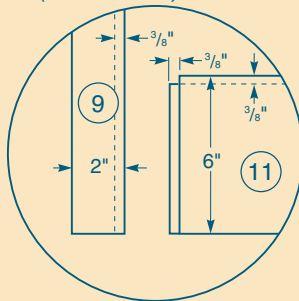


**Middle Door Rail  
(Front View)**

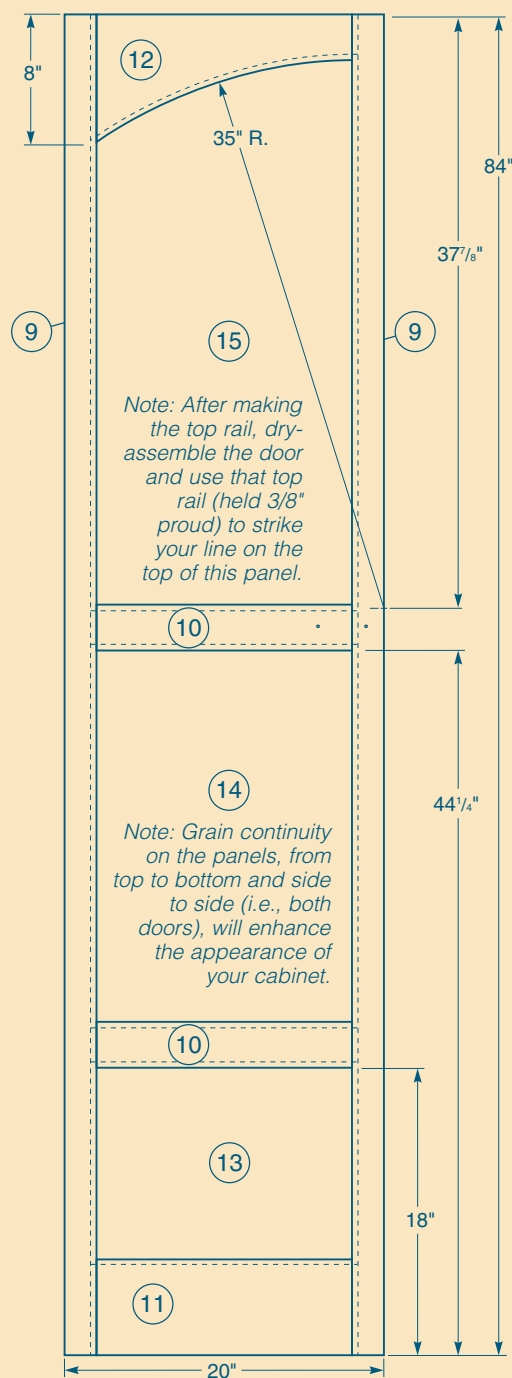


Note: All door grooves are 3/8" deep by 1/4" wide.

**Bottom Door Rail  
(Front View)**



**Door Frame and Panel  
(Front View)**



## MATERIAL LIST—CARCASS & DOOR

		T x W x L
1	Carcass Sides (4)	$\frac{3}{4}$ " x $21\frac{3}{16}$ " x 84"
2	Carcass Tops and Bottoms (4)	$\frac{3}{4}$ " x $21\frac{3}{16}$ " x 19"
3	Fixed Shelves (2)	$\frac{3}{4}$ " x 18" x 19"
4	Divider Shelves (6)	$\frac{3}{4}$ " x 17" x 19"
5	Rod Base Shelves (2)	$\frac{3}{4}$ " x $10\frac{5}{8}$ " x 19"
6	Rod Divider Shelves (2)	$\frac{3}{4}$ " x $10\frac{5}{8}$ " x 19"
7	Carcass Backs (2)	$\frac{1}{4}$ " x 19" x $83\frac{1}{4}$ "
8	Pine Edging (1)	$\frac{1}{8}$ " x $\frac{3}{4}$ " x 75'
9	Door Stiles (4)	$\frac{3}{4}$ " x 2" x 84"
10	Middle Rails (4)	$\frac{3}{4}$ " x 3" x $16\frac{3}{4}$ "
11	Bottom Rails (2)	$\frac{3}{4}$ " x 6" x $16\frac{3}{4}$ "
12	Top Rails (2)	$\frac{3}{4}$ " x 8" x $16\frac{3}{4}$ "
13	Bottom Panels (2)	$\frac{1}{4}$ " x 17" x $12\frac{3}{4}$ "
14	Middle Panels (2)	$\frac{1}{4}$ " x 17" x 24"
15	Top Panels (2)	$\frac{1}{4}$ " x 17" x $34\frac{3}{4}$ "



Use a  $\frac{1}{4}$ " slot cutter in your router table to help make the symmetrically curved top door rails. The rails provide a nice bit of visual interest to this tall slender cabinet.

piano hinges support the doors and some fancy, fish-shaped pulls dress the unit. If you have a well outfitted shop and a measure of determination, you might be able to polish off this piece in a long weekend.

### Constructing the Big Box

Slice up your sheet stock first, cutting the four sides and their tops and bottoms (pieces 1 and 2) from knotty pine plywood (see the *Cutting Diagram* on page 134). Rick chose to make one large box for each compartment of the cabinet. After you assemble each box, slice the door sections off the front of each one, ensuring perfectly matched doors and cabinet sections. Before you start assembly, look to the *Elevation Drawings* on the facing page for the locations of the dados and rabbets you'll need to plow for the shelves and back, and the tops and bottoms.

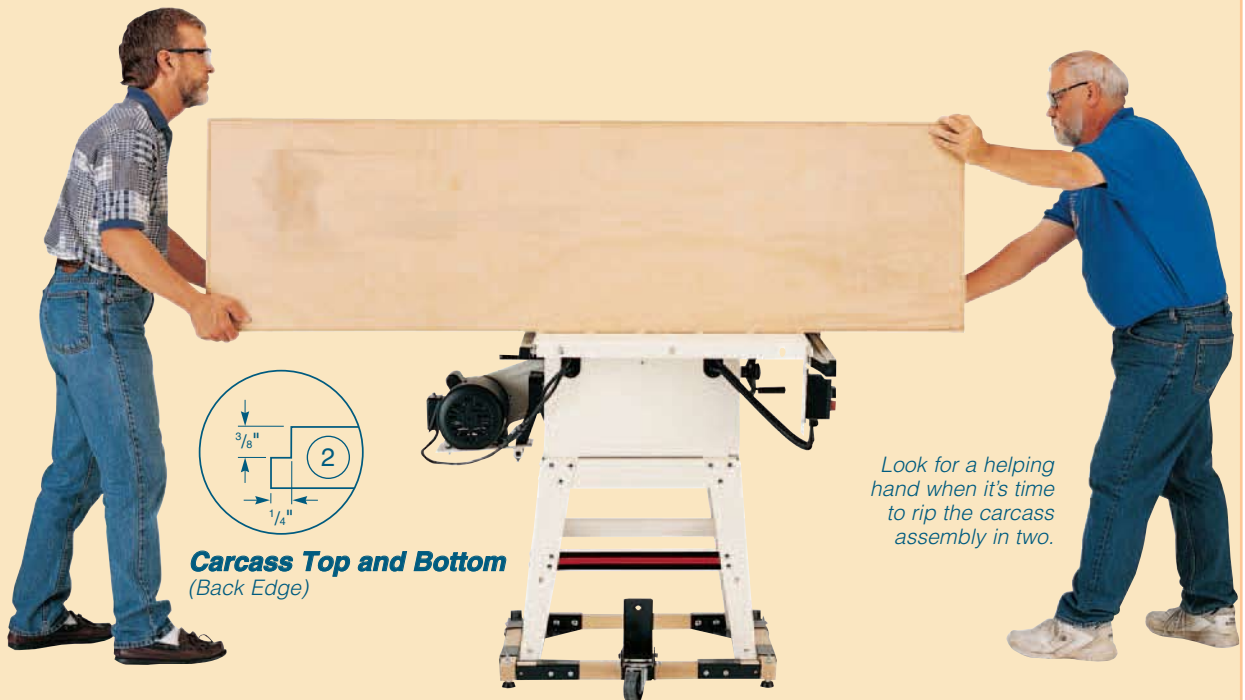
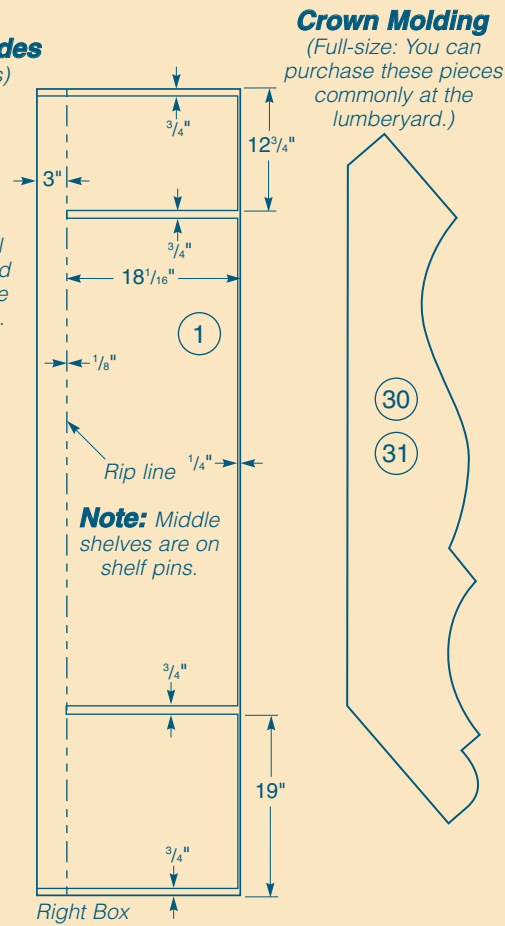
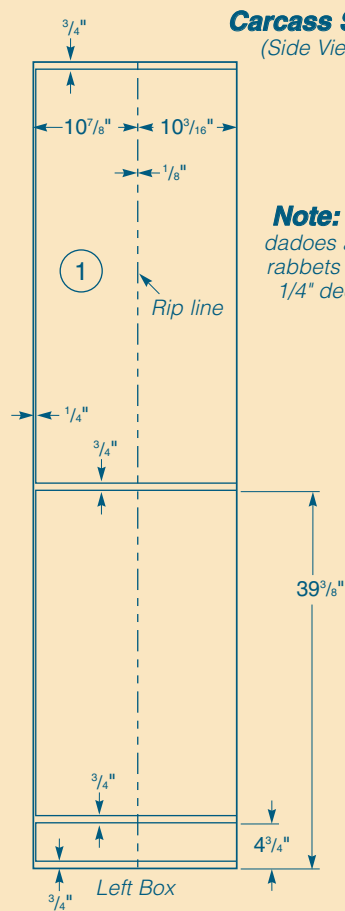
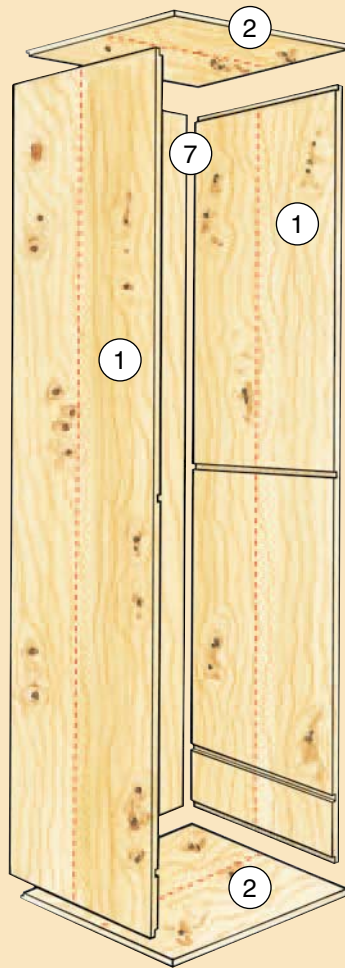
Be sure to check the actual thickness of your lumber and plywood before you start the various machining operations — even manufactured stock can vary in thickness. Once you've completed your machining, join the sides, tops and bottoms with glue and screws set into counterbored holes. (Plug the holes later with flat-topped pine plugs.) Now make the fixed shelves and divider shelves (pieces 3 and 4) that go into the gear storage side of the cabinet. On the rod-holding side you will need to make matching pairs of rod divider and rod base shelves (pieces 5 and 6). The *Scaled Drawings* on page 134 show the shapes and machining details for these solid-lumber pieces. Lastly, mount the plywood backs (pieces 7) into each compartment, making sure the units are square before the glue cures.

### More Than Just Making the Doors

When it comes time to cut the door sections off the large boxes, ask a friend to lend a hand (see *photo*, next page). It's safer and easier than doing it yourself. Making the doors this way not only ensures a perfect fit to the carcass, but it also keeps the grain pattern intact on the side panels. After the door sections are removed, glue the fixed shelves and the rod holders in place. Then apply  $\frac{1}{8}$ "-thick pine edging (piece 8) to hide the exposed edges of the plywood.

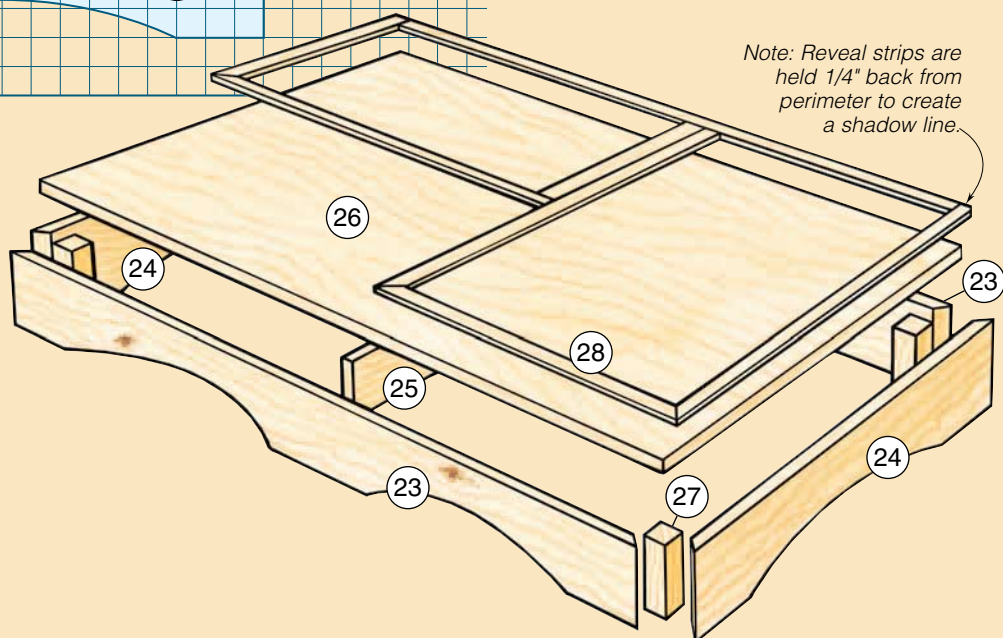
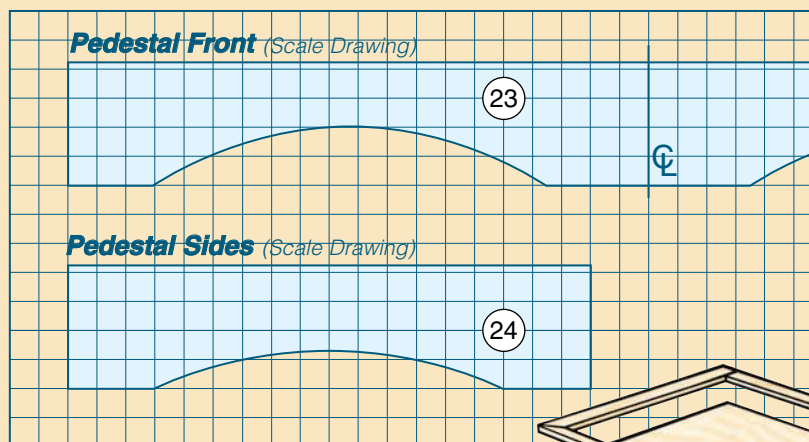
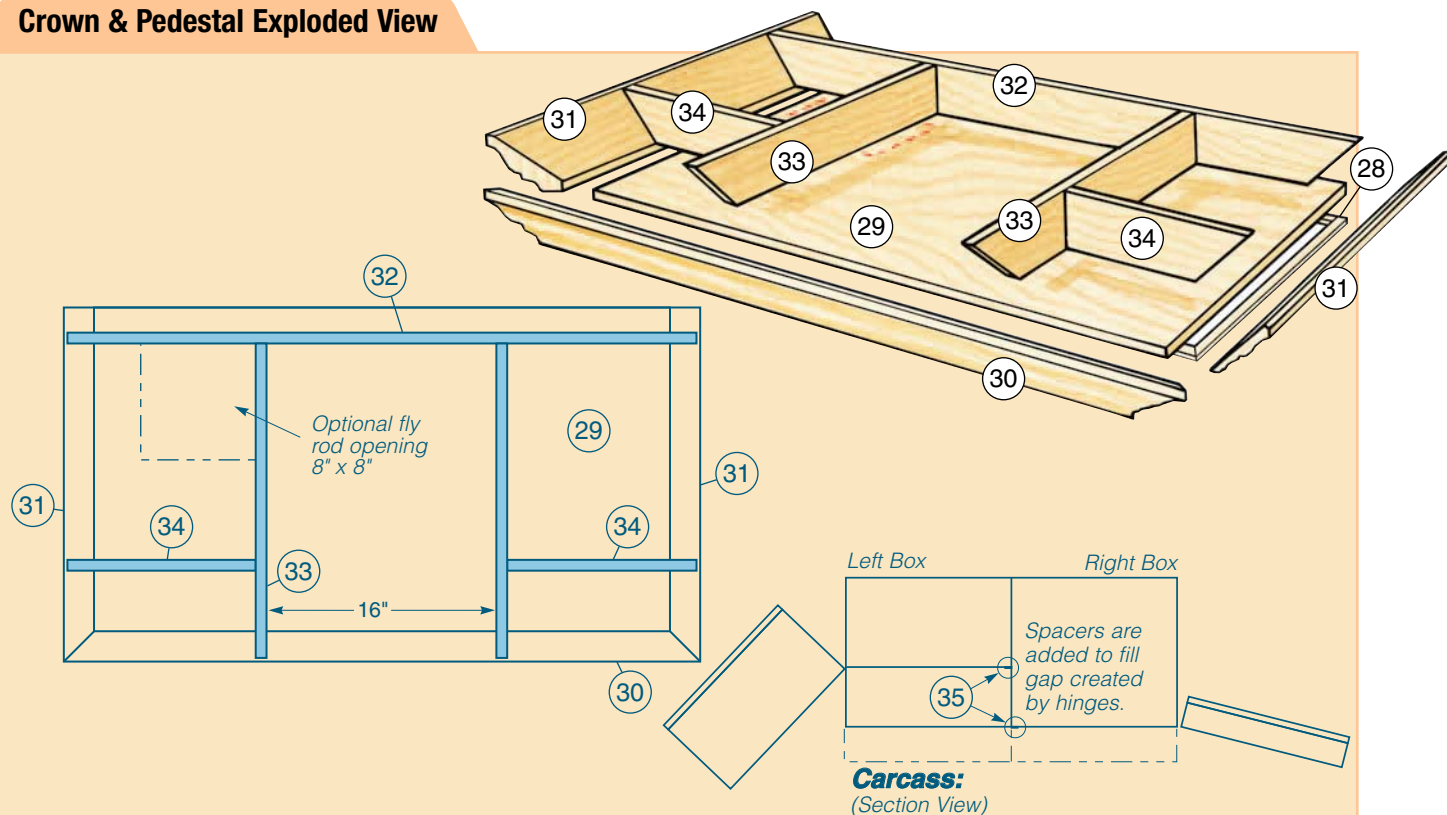
The front of each of the door sections is closed up with a classic frame-and-panel assembly, accented with symmetrically arched top rails. Make the flat door

## Left Box Exploded View



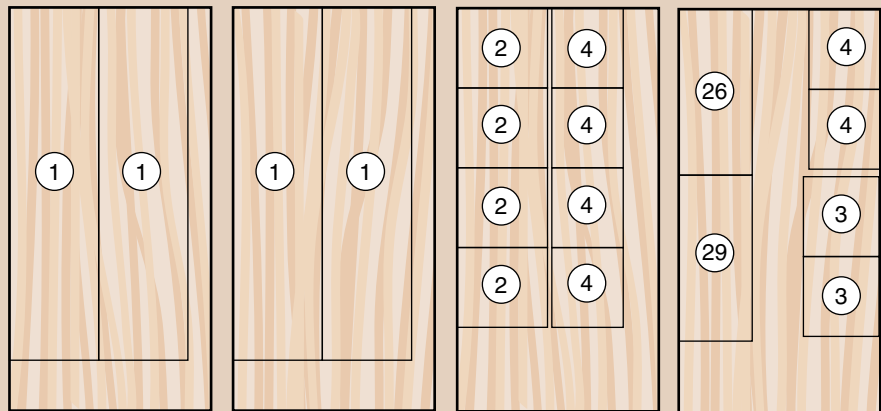


# Crown & Pedestal Exploded View

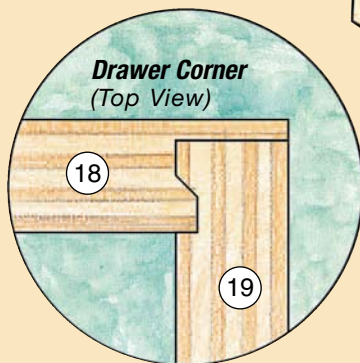
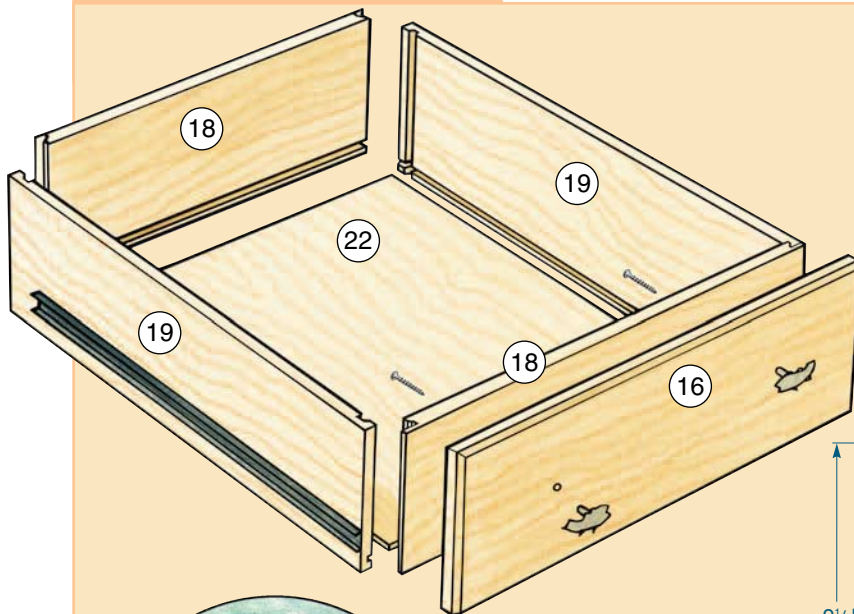


## CUTTING DIAGRAM FOR 3/4" KNOTTY PINE PLYWOOD

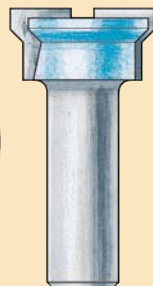
Knotty pine plywood is a good choice for this cabinet because it has the stability of regular plywood combined with the beauty of knotty pine lumber. You will need to purchase this plywood at a full-service lumberyard — one that commonly deals with cabinet-grade hardwood and plywood. (While you're there, pick up the crown molding.) Use the cutting diagrams at right for sizing down each sheet of plywood.



### Drawer Exploded View

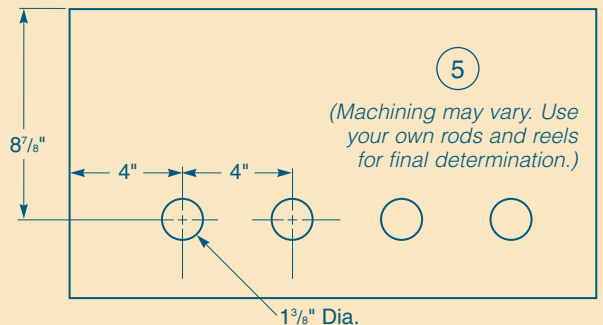
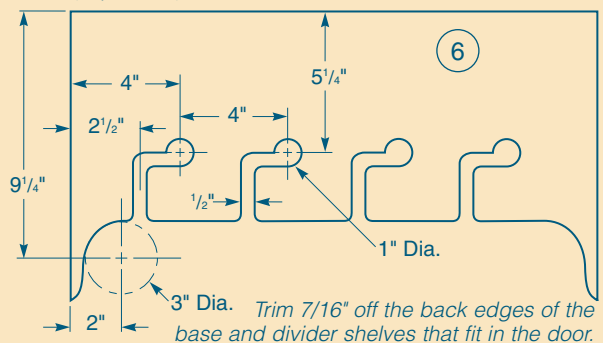


We used a drawer lock bit (above) to form the corner joinery on his drawers. The bit cuts an interlocking joint in both the sides and front/back with one set-up in your router table. Be sure to lightly mark the orientation of your stock before machining.



Simply change the orientation of your stock and the fence position for the opposing cuts.

### Rod Base and Divider Shelves (Top Views)





panels with 1/4" knotty pine plywood.

Select straight pine lumber to make the stiles and rails (pieces 9 through 12) and cut these pieces to size. Tight knots are acceptable, as they add to the overall rustic look of the cabinet. Start the machining by plowing a 1/4"-wide by 3/8"-deep groove down the length of the stiles' inside edges, using a 1/4" dado head. Do the same to the appropriate edges of the middle and bottom rails. Now set up your miter gauge and employ the same dado head to form the full-width tenons at the ends of all the rails. (The top rails remain rectangular for the moment.)

On a large, flat work surface, temporarily clamp the stiles and rails together as they will appear on the front of the cabinet. (You don't need the panels during this test assembly.) Make sure the clamp-up is square and true. At the center seam, measure down 37 1/8" and strike a 35" radius across the top rails to create their gentle curve. Disassemble the clamp-up and take the top rails over to your band saw. Cut the arcs and then sand the rough saw marks smooth while holding the rails together as a

pair. Chuck a 1/4" bearing-guided slot cutter in your router table and plow a groove centered along the curved edge of each rail, as shown in the *photo* on page 131.

With that done, you're ready to cut up your 1/4" knotty pine plywood to form the flat panel sections (pieces 13, 14 and 15) of the door. The key here is to select material in such a way that the grain flows visually across the front of both doors and through the rails. Test-fit the door assemblies together, leaving off the curved top rails. Lay the curved rails on top of the assemblies (but hold them 3/8" proud of the top of the door stiles), and use the curved bottom edge to strike a pencil line onto the upper door panel. Take the top panels to the band saw and cut the curve right on the pencil line. You may want to scribe the line with a shop knife to prevent grain tear-out. Do one final test-fit before you glue and clamp the door subassemblies together. Then secure the door fronts to the cut-off door assemblies with glue and finish nails. Scrape and sand the doors smooth, and you're ready to move on to making the drawers.



*Tongue-and-groove pine paneling is a final detail in this Northwoods fishing cabinet. Finished with orange shellac, this project will look great in your den, cabin or vacation home.*



*A little hardware splurge adds a rustic touch and some identity to this angler's cabinet.*

## Making the Drawers, Index Holes and Top Opening

The two drawers are made mostly of 1/2" material (pieces 16 through 21) with 1/4" plywood bottoms (pieces 22). We used a drawer lock router bit (see *drawings* on the previous page) to form the drawers' corner joints. It works slick: Just cut the sides, fronts and backs to size, plow the 1/4" bottom dadoes (1/4" up from the bottoms), and use the bit to rout the corner joints on your router table. A little test-fitting on some scrap lumber is all the set-up that's required.

Once the drawer boxes are glued up, mount them in the cabinet on full-extension drawer slides and use double-sided tape to fit the faces to the front of each drawer. Nice and easy. With the drawers ready to go, move on to drilling the index holes for the shelf support pegs.

If you're a fly fisher, one last detail you may want to include is the opening at the top of the rod holder side the cabinet. Rick bored it so his fly rods could extend out through the top. You may not need this detail, as the interior height is sufficient for most ordinary fishing rods. Make this opening with a jigsaw, and cover the exposed plywood with your 1/8" pine edging.

## Adding the Crowning Touches

This cabinet sits on a separate pedestal and is capped off with crown molding (purchased), held in place with some bracing. The pedestal is framed up with a front, back

and two side pieces as well as a center support beam (pieces 23 through 25). See the *Exploded View Drawing* on page 133 for construction details. Band-saw the exposed front and side members of the pedestal with the decorative curves shown in the *Scaled Drawings* on page 133. Glue and screw the base together and drop the base top (piece 26) in place to square up the subassembly. Glue cleats (pieces 27) in each corner to provide a little extra support. Now trim out the pedestal with 1/4"-thick reveal strips (piece 28) mitered around the top edge, holding them back 1/4". These strips separate the carcass from the base (and, later, the crown molding), and create a pleasing shadow line. They also allow the large doors to swing freely.

Next, create the crown molding sub-assembly. Wrap the crown molding around a 3/4" plywood cap (pieces 29, 30 and 31). On the underside of the cap secure more of the reveal strip with glue and small brads. Next, cut an opening to match the fly rod hole in the top of the rod holder side the cabinet. (If you didn't include this detail, ignore this step.) Finally, install bracing (pieces 32 through 34) to add support to the top's crown molding (see *drawings*).

A word to the wise: Because the cabinet is so tall, install the base and top after you've placed the cabinet in your room. This will make it a lot easier to set the cabinet upright in a typical house with 8-foot ceilings. Mount the subassemblies prematurely and the cabinet may not fit.

## Adding Some Fishy Hardware

With most of the work done, temporarily mount the pedestal and base to the cabinet. Then hang the doors, using wrap-around piano hinges for strength and durability. You will have to notch the wrapping aspect of the hinges to fit around the fixed shelves. To accommodate the thickness of the hinges, glue several small spacers (pieces 35) in place.

Rick selected specialty fish-shaped pulls on the doors and drawers. You can buy it from Rockler (800-610-0883 or [www.rockler.com](http://www.rockler.com)). Then mount magnetic catches to hold the doors shut. Finally, to add to the Northwoods theme, cut and fit 1/4" pine tongue-and-groove paneling (piece 36) inside the cabinet and doors. Glue it in place (see photo on page 135) and use a few small brads for insurance.

## MATERIAL LIST—DRAWERS, PEDESTAL & CROWN

		T x W x L
16	Small Drawer Face (1)	1/2" x 6" x 18 1/4"
17	Large Drawer Face (1)	1/2" x 12" x 18 1/4"
18	Sm. Drawer Front and Back (2)	1/2" x 6" x 17 1/4"
19	Sm. Drawer Sides (2)	1/2" x 6" x 17"
20	Lg. Drawer Front and Back (2)	1/2" x 12" x 17 1/4"
21	Lg. Drawer Sides (2)	1/2" x 12" x 17"
22	Drawer Bottoms (2)	1/4" x 16 1/2" x 17"
23	Pedestal Front and Back (2)	3/4" x 4 1/4" x 40"
24	Pedestal Sides (2)	3/4" x 4 1/4" x 18"
25	Pedestal Support Beam (1)	3/4" x 3 1/2" x 16 1/2"
26	Pedestal Top (2)	3/4" x 16 1/2" x 38 1/2"
27	Support Cleats (4)	3/4" x 3/4" x 3 1/2"
28	Reveal Strip (1)	1/4" x 3/4" x 250"
29	Crown Cap (1)	3/4" x 21 11/16" x 39 1/2"
30	Crown Front Molding* (1)	3/4" x 3 5/8" x 45"
31	Crown Side Molding* (2)	3/4" x 3 5/8" x 22"
32	Crown Long Brace* (1)	3/4" x 2" x 43 3/4"
33	Crown Medium Braces* (2)	3/4" x 2" x 21 7/8"
34	Crown Short Braces* (2)	3/4" x 2" x 13 3/16"
35	Door Spacers (6)	1/8" x 3/4" x 2"
36	Pine Paneling (1)	1/4" x 40 sq. ft.

## Finishing Up with Shellac

After the paneling is in place, it's time for a thorough sanding inside and out (always a pain!) followed by several coats of orange shellac (see the *tip* on mixing shellac on the next page). Sand lightly after the first coat to remove any dust nibs. After that, you can apply the remaining coats without sanding — shellac partially dissolves the layer of finish underneath and fuses to it for a good bond without sanding. You just can't beat orange shellac as a finish on pine lumber. It brings out the beauty of the grain and knots and adds a real warmth to the wood.

Now, all you have to do is figure out a way to quietly get all your fishing gear into the cabinet without anyone noticing how much stuff you actually own!



### Floor Kill Switch

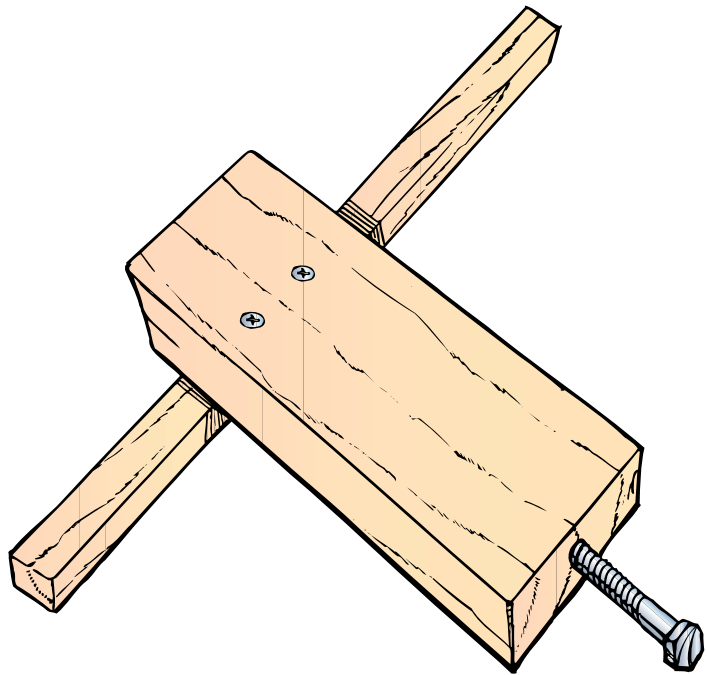
If you frequently cut large sheets of plywood for casework, you know how hard it is to reach the table saw's switch when something goes wrong. Many catalog and retail outlets sell a foot-operated switch that is plugged into the wall, then the saw is plugged into the switch. By placing the switch a couple of feet in front of the saw, but a little to one side, you can easily reach it in an emergency, yet avoid accidentally turning off the saw in the middle of a cut.

### Mixing and Storing Shellac

Shellac flakes are mixed with denatured alcohol in various ratios, or cuts. One pound of shellac mixed with one gallon of alcohol produces what is called a "one-pound cut." A three-pound cut would still only have one gallon of alcohol, but three pounds of flakes. The lower the cut, the thinner the mix. That means more coats, but a smoother application. It's all a matter of personal preference. Either way, make sure you buy fresh flakes, as older stock will give you some serious application headaches. You can also buy shellac as premixed liquid in a can, but it will typically be closer to a three-pound cut. Thin it with denatured alcohol, just as do with flake shellac.

Even fresh flake shellac can take several hours to dissolve in alcohol. You can speed up the process by pulverizing the flakes in a plastic freezer bag with a rolling pin or by chopping them up in a coffee grinder.

Whether you mix flakes or liquid shellac to your desired cut, be sure to do the mixing in a clean, plastic or glass container. Shellac will react with metal — be it a coffee can or metal lid — which will change its color. Store mixed shellac for no more than six months, and test it before you use it on scrap. If the shellac doesn't cure to a hard film in a few hours, it's too old and should be discarded.



### Table Saw Blade Alignment Jig

This little jig (above and below) slides in the miter gauge slot on your table saw and makes it possible to align the blade perfectly with the slot. Make it from two pieces of scrap and drive a hex-head lag bolt into the end. To use it, set the head of the bolt so it just barely grazes the saw blade at the front of the blade, as close to the teeth as possible. Then slide the jig to the back of the blade and without moving the bolt, check again to see if any minor realignment is required. Most experts agree that both the front and the rear of the blade should be exactly parallel with the miter slot — as well as to the rip fence.

